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Description of a new green bulbul from the Republic of Zaire

by *A. Prigogine*

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Andropadus virens Cassin figures prominently among green bulbuls as the most common in African forests. It is a bird of secondary growth and thickets on the edges of clearings (Chapin 1953). Several subspecies, differing from the nominate form in size and intensity of coloration, have been described from different parts of Africa, especially from East Africa (White 1962).

In the eastern part of the Republic of Zaire, the green bulbul *A. v. virens* is an extremely common bird, especially in secondary forest, and my hunters have procured for me a long series of it (Prigogine 1971), the series being very homogenous, scarcely varying from one region to another. This is why my attention was immediately drawn to a specimen resembling *A. virens*, but easily distinguishable from these others by a blackish beak, a tarsus and feet equally blackish and a generally more dark colour of plumage.

Mrs. B. P. Hall was kind enough to examine this specimen and confirmed my observations, and also drew my attention to other peculiarities which had escaped me. As the new form is sympatric with *A. virens*, it is a question of a distinct species. Mrs. Hall (*in litt.*) is also of the opinion that this bird probably represents a new species, which I propose to call:—

Andropadus ballae, sp. nov.

Type: ♂ adult, collected 16th September 1970 at Nyamupe (3° 21' S., 28° 08' E.), altitude 990 m. In Musée royal de l'Afrique Centrale, Tervuren, registered number 124.702 (my collector's number 15.009).

Description: Resembles *A. v. virens*, but the general appearance of *ballae* is markedly darker; in particular, crown and back dark olive-green with the upper tail-coverts a little lighter, rectrices olive-green washed with dark brown, chin and throat dark green without any yellowish wash, remainder of underside dark green slightly yellowish in the middle of the abdomen, under tail-coverts greenish olive with lighter tips, remiges olive-green washed with dark brown, interior of remiges dark grey becoming paler towards the margins, axillaries pale green, upper and lower mandibles almost black, tarsus and feet black with claws blackish.

Dimensions: Wing 75 mm, tail 68 mm, culmen from skull 15 mm, tarsus 18 mm.

For comparison, the following are some measurements of *virens* from eastern Zaire:—

Locality		Wing	Tail
Vicinity of Kamituga	10♂♂	73 - 78 (75.1)	65 - 72 (67.9)
	10♀♀	69 - 74 (71.2)	63 - 69 (65.7)
Vicinity of Maboya	6♂♂	76 - 78 (76.7)	70 - 73 (71.2)
	4♀♀	70 - 73 (71.8)	66 - 69 (67.8)

It can thus be stated that there is no difference in size between *ballae* and *virens*.

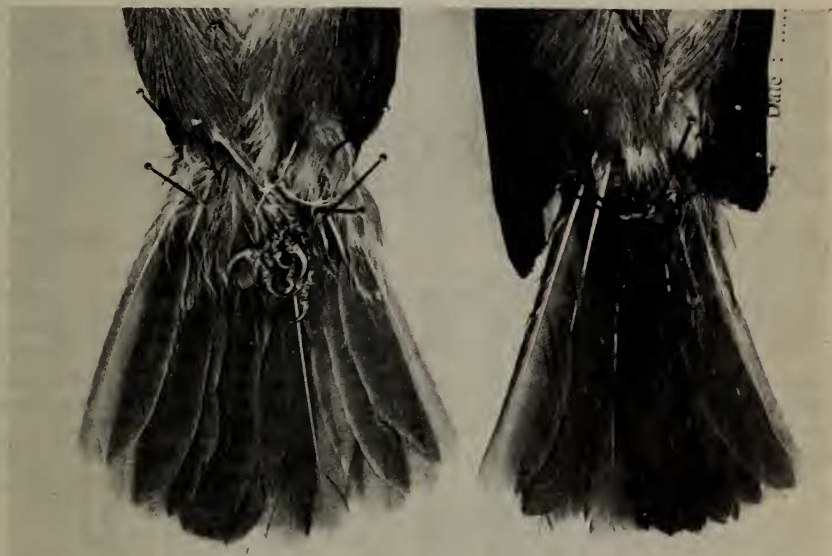


Plate. Tail and anterior of underside of (left) *Andropadus virens*, (right) *A. ballae*.

On the other hand, *ballae* differs from *virens* in having a tail clearly less graduated (see Plate), and it should be emphasised that there is no question of the tail of the specimen being in moult. Thus the difference (D) between the longest rectrices and the external ones is merely 3.5 mm in *ballae*, whereas I have found that for various specimens of *virens* from the same region the value of D is appreciably greater: 8.3 mm for the average of males and 7.4 mm for the average of females (see Table).

The specimen of *ballae* was obtained in primary forest by my hunter Kalinde Musiko, who insisted on the fact that the place of collection did not correspond with the normal habitat of *virens*, which is nevertheless very widespread in this region as a whole. Thus it seems that *ballae* must be a bird of primary forest. The altitude of collection being 990 m, I assume that it is a form associated with transitional (i.e. between montane and lowland) forest, and very probably only in a narrow altitudinal belt.

It may also be noted that the gonads of the type of *ballae* were slightly enlarged (5 × 3 and 3 × 2 mm), indicating without doubt the proximity of the breeding season (perhaps starting in October).

TABLE

Species	Form of beak	Colour of beak	Colour of feet	Colour of claws	D (1) (2) tail (mm)	Tail (T) (1) (mm)	D/T %
<i>ballae</i>	large	brownish black	black	blackish	♂ 3·5	68	5·1
<i>virens</i>	large	light brown	brownish	brownish	♂ 8·3 (5·5-10·5)	67·9 (65-79) (10♂)	12·1
					♀ 7·4 (5-10)	65·7 (63-69) (10♀)	11·1
<i>latirostris</i>	large	brownish	brownish yellow	brownish yellow	♂ 9·2 (8-13)	76·2 (71-81) (5♂)	12·1
					♀ 8·6 (7-10)	72·4 (69-77) (5♀)	11·9
<i>curvirostris</i>	fine, pointed	blackish brown	blackish	dark brown	♂ 9·2 (8-10)	73·2 (69-77) (13♂)	12·6
					♀ 9·0 (8-10)	70·0 (68-73) (9♀)	12·8
<i>gracilis</i>	fine, pointed	blackish brown	blackish	dark brown	♂ 4·8 (4-6)	63·0 (60-66·5) (17♂)	7·6
					♀ 3·8 (3-5)	60·6 (57-63) (9♀)	6·3
<i>ansorgei</i>	fine, pointed	blackish brown	blackish	dark brown	♂ 3·8 (3-5)	64·4 (60-69) (10♂)	5·9
					♀ 3·8 (3-5)	62·2 (60·5-65) (6♀)	6·1
<i>gracilirostris</i>	fine, pointed	blackish	blackish	blackish	♂ 8·6 (6-11)	75·0 (74-77) (5♂)	11·5
					♀ 7·0 (6-9)	75·0 (73-77) (5♀)	9·3
<i>montanus</i>	fine, pointed	blackish brown	blackish brown	light brown	♂ 10·4 (8-14)	80·2 (77-84) (5♂)	12·9
					♀ 9·0 (7-13)	75·4 (72-77) (5♀)	11·9
<i>tephrolaemus</i>	fine, pointed	blackish brown	brownish	brownish	♂ 9·6 (8-11)	88·2 (86-91) (5♂)	10·9
					♀ 7·8 (7-9)	86·4 (84-88) (5♀)	9·0

(1) These measurements refer to specimens from the same region.

(2) Average of 20 measurements for *virens*, average of 5 for the other species.

The description of this bulbul has been a considerable preoccupation to me, above all because it is based on a single specimen, and an examination of all the specimens (about 1,000) of *virens* in the collection at Tervuren, emanating from all parts of Zaire, has not resulted in the discovery of another such specimen. Nevertheless as the provenance of the type of *ballae* will probably remain inaccessible for a long time, I have decided to publish this description in order to draw attention to the special characters of the specimen collected.

The new species is without doubt an *Andropadus*, as is shown by the beak, which has several notches on the edges of the upper mandible, and by other morphological characters. In general, *ballae* resembles *virens*, and it is necessary to consider these two sympatric (although with an ecological separation) species as siblings.

Nevertheless this resemblance could be only superficial, for *ballae* differs from *virens* by the different form of the tail. I have shown in the Table all the species of *Andropadus* which occur in the vicinity of Kamituga and in the highlands of Itombwe. Based on the form of the beak, we have a group *ballae*, *latirostris* and *virens*, with a large beak, and a group *ansorgei*, *curvirostris*, *gracilirostris*, *gracilis*, *montanus* and *tephrolaemus*, with a fine and pointed beak.

On the other hand, it seems possible to classify these *Andropadus* bulbuls equally well as a function of the value of D, the difference between the longest (central) rectrices and the shortest (external) ones. Thus most of the species have a graduated tail with the value of D in the order of 10%. Expressing D in percentages (average for the two sexes) we have:—*virens* 11.6, *latirostris* 12.0, *curvirostris* 12.7, *gracilirostris* 10.4, *montanus* 12.4, *tephrolaemus* 10.0. By contrast, in the three other species, the corresponding figures are appreciably less, varying only from 5 to 7%:—*ballae* 5.1, *gracilis* 7.0, *ansorgei* 6.0. Indisputably *ballae* belongs to the group comprising *gracilis* and *ansorgei*, of relatively small size and with a fine beak.

Two hypotheses have also been considered in regard to *ballae*:—

(1) It is an aberrantly coloured specimen of *virens*, the plumage containing an abnormal amount of melanin. This is not in keeping with the form of the tail, which is different from that of *virens*.

(2) It is a hybrid between *virens* and some other species of *Andropadus*. As *ballae* has a small value for D, in contrast to *virens*, all the species characterised by a strongly graduated tail can be excluded. Thus there remain only *ansorgei* and *gracilis*. But these two species are markedly smaller than *ballae* and *virens*, and I do not see how a hybridisation with *virens* could result in a bird having the characters of *ballae*. Thus this hypothesis must also be discarded.

Andropadus ballae is named in honour of Mrs. B. P. Hall, in recognition of her great contribution to the taxonomy and zoogeography of African birds.

To conclude, I wish to express my gratitude to Mr. C. W. Benson, who has not only advised me in the preparation of this paper, but has also very kindly translated it.

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